1. A magnetic write head comprising:

an ABS, a top pole having a first top surface and a first thickness, and a bottom pole, said poles being separated by a write gap;

said top pole including an end piece having a top surface that is coplanar with said first top surface and a thickness that exceeds said first thickness by between about 0.1 and 0.5 microns, said end piece being disposed to lie directly above said bottom pole and extending horizontally from the ABS for between about 0.3 and 1 microns;

said bottom pole further comprising front and rear sections resting on a flat layer having an outer edge;

said front section further comprising:

trapezoidal front and rear vertical walls, separated by a second thickness, and an upper flat area;

centrally located on said upper flat area, a flux concentrator that extends upwards towards said end piece, thereby defining said write gap, and having an upper surface;

said rear section further comprising:

a rectangular prism having vertical inner and outer walls with said inner wall symmetrically contacting said trapezoidal rear wall and said outer wall extending to said flat layer outer edge;

said rectangular prism having an upper surface that is lower than said flux concentrator upper surface by less than about 0.3 microns and higher than said upper flat area by less than about 0.3 microns;

connected to said flux concentrator on said rectangular prism upper surface, a flux extender whose upper surface is coplanar with said flux concentrator upper surface, and that extends therefrom for a distance; and

said end piece, said flux concentrator, and said trapezoidal front wall all having surfaces that form part of said ABS.

2. The write head described in claim 1 wherein said top pole first thickness is between about 0.7 and 2 microns.

3. The write head described in claim 1 wherein said second thickness separating said trapezoidal walls is between about 0.3 and 1 microns.

4. The write head described in claim 1 wherein said flux concentrator extends upwards from said upper flat area between about 0.1 and 0.4 microns.

5. The write head described in claim 1 wherein the distance that the flux extender extends from the flux concentrator is between about 0.5 and 2 microns.

6. The write head described in claim 1 wherein said rectangular prism has a height of between about 2 and 4.5 microns.

7. The write head described in claim 1 wherein said flat layer, on which said front and rear sections rest, is between about 2 and 4.5 microns. thick.

8. A magnetic write head comprising:

an ABS, a top pole having a first top surface and a first thickness, and a bottom pole, said poles being separated by a write gap;

said top pole having a planar lower surface that defines an upper bound for said write gap;

said bottom pole further comprising front and rear sections resting on a flat layer having an outer edge;

said front section further comprising:

trapezoidal front and rear vertical walls, separated by a second thickness, and an upper flat area;

centrally located on said upper flat area, a flux concentrator that extends upwards towards said end piece, thereby defining a lower bound for said write gap, and having an upper surface;

said rear section further comprising:

a rectangular prism having vertical inner and outer walls with said inner wall symmetrically contacting said trapezoidal rear wall and said outer wall extending to said flat layer outer edge;

said rectangular prism having an upper surface that is lower than said flux

concentrator upper surface by less than about 0.3 microns and higher than said upper flat area by less than about 0.3 microns;

connected to said flux concentrator on said rectangular prism upper surface, a flux extender whose upper surface is coplanar with said flux concentrator upper surface, and that extends therefrom for a distance; and

said end piece, said flux concentrator, and said trapezoidal front wall all having surfaces that form part of said ABS.

9. The write head described in claim 8 wherein said top pole first thickness is between about 0.7 and 0.2 microns.

10. The write head described in claim 8 wherein said second thickness separating said trapezoidal walls is between about 0.3 and 1 microns.

11. The write head described in claim 8 wherein said flux concentrator extends upwards from said upper flat area between about 0.1 and 0.4 microns.

12. The write head described in claim 8 wherein the distance that the flux extender extends from the flux concentrator is between about 0.5 and 2 microns.

13. The write head described in claim 8 wherein said rectangular prism has a height of

between about 2 and 4.5 microns.

14. The write head described in claim 8 wherein said flat layer, on which said front and rear sections rest, is between about 2 and 4.5 microns thick.

15. A magnetic write head comprising:

an ABS, a top pole having a first top surface and a first thickness, and a bottom pole, said poles being separated by a write gap;

said top pole having a planar lower surface that defines an upper bound for said write gap;

said bottom pole further comprising front and rear sections resting on a flat layer that extends to a first distance from said ABS;

said front section further comprising:

trapezoidal front and rear vertical walls, separated by a second thickness, and an upper flat area;

centrally located on said upper flat area, a flux concentrator that extends upwards towards said end piece, thereby defining a lower bound for said write gap, and having an upper surface;

said rear section further comprising:

a rectangular prism having vertical inner and outer walls with said inner wall symmetrically contacting said trapezoidal rear wall;

said inner and outer walls being separated by a second distance, which is less than said first distance, whereby a portion of said flat layer is not covered by said rectangular prism;

said rectangular prism having an upper surface that is lower than said flux concentrator upper surface by less than about 0.3 microns and higher than said upper flat area by less than about 0.3 microns;

connected to said flux concentrator on said rectangular prism upper surface, a flux extender whose upper surface is coplanar with said flux concentrator upper surface, and that extends therefrom for a distance; and

said top pole piece, said flux concentrator, and said trapezoidal front wall all having surfaces that form part of said ABS.

16. The write head described in claim 15 wherein said top pole first thickness is between about 0.7 and 2 microns.

17. The write head described in claim 15 wherein said second thickness separating said trapezoidal walls is between about 0.3 and 1 microns.

18. The write head described in claim 15 wherein said flux concentrator extends upwards from said upper flat area between about 0.1 and 0.4 microns.

19. The write head described in claim 15 wherein the distance that the flux extender extends from the flux concentrator is between about 0.5 and 2 microns.

20. The write head described in claim 15 wherein said rectangular prism has a height of between about 2 and 4.5 microns.

21. The write head described in claim 15 wherein said flat layer, on which said front and rear sections rest, is between about 1.4 and 2.6 microns thick.

22. A magnetic write head comprising:

an ABS, a top pole having a first top surface and a first thickness, and a bottom pole, said poles being separated by a write gap;

said top pole including an end piece having a top surface that is coplanar with said first top surface and a thickness that exceeds said first thickness by between about 0.1 and 0.5 microns, said end piece being disposed to lie directly above said bottom pole and extending horizontally from the ABS for between about 0.3 and 1 microns;

said bottom pole further comprising front and rear sections resting on a flat layer having an outer edge;

said front section further comprising:

trapezoidal front and rear vertical walls, separated by a second thickness, and an upper flat area;

centrally located on said upper flat area, a flux concentrator that extends upwards towards said end piece, thereby defining said write gap, and having an upper surface;

said rear section further comprising:

a rectangular prism having vertical inner and outer walls with said inner wall symmetrically contacting said trapezoidal rear wall;

said inner and outer walls being separated by a second distance, which is less than said first distance, whereby a portion of said flat layer is not covered by said rectangular prism;

said rectangular prism having an upper surface that is lower than said flux concentrator upper surface by less than about 0.3 microns and higher than said upper flat area by less than about 0.3 microns;

connected to said flux concentrator on said rectangular prism upper surface, a flux extender whose upper surface is coplanar with said flux concentrator upper surface, and that extends therefrom for a distance; and

said end piece, said flux concentrator, and said trapezoidal front wall all having surfaces that form part of said ABS.

23. The write head described in claim 22 wherein said top pole first thickness is between about 0.7 and 2 microns.

24. The write head described in claim 22 wherein said second thickness separating

said trapezoidal walls is between about 0.3 and 1 microns.

25. The write head described in claim 22 wherein said flux concentrator extends upwards from said upper flat area between about 0.1 and 0.4 microns.

26. The write head described in claim 22 wherein the distance that the flux extender extends from the flux concentrator is between about 0.5 and 1.5 microns.

27. The write head described in claim 22 wherein said rectangular prism has a height of between about 2 and 4.5 microns.

28. The write head described in claim 22 wherein said flat layer, on which said front and rear sections rest, is between about 1.4 and 2.6 microns thick.

29. A magnetic write head comprising:

an ABS, a top pole having a first top surface and a first thickness, and a bottom pole, said poles being separated by a write gap;

said top pole having a planar lower surface that defines an upper bound for said write gap;

said bottom pole further comprising front and rear sections resting on a flat layer that extends a first distance from said ABS;

said front section further comprising:

trapezoidal front and rear vertical walls, separated by a second thickness, and an upper flat area;

centrally located on said upper flat area, a flux concentrator that extends upwards towards said end piece, thereby defining a lower bound for said write gap, and having an upper surface;

said rear section further comprising:

a rectangular prism having vertical inner and outer walls with said inner wall symmetrically contacting said trapezoidal rear wall;

said inner and outer walls being separated by a second distance which is less than said first distance, whereby a portion of said flat layer is not covered by said rectangular prism;

said rectangular prism having an upper surface that is coplanar with said flux concentrator upper surface; and

said lower pole, said flux concentrator, and said trapezoidal front wall all having surfaces that form part of said ABS.

30. The write head described in claim 29 wherein said top pole first thickness is between about 0.7 and 2 microns.

31. The write head described in claim 29 wherein said second thickness separating

said trapezoidal walls is between about 0.3 and 1 microns.

32. The write head described in claim 29 wherein said flux concentrator extends upwards from said upper flat area between about 0.1 and 0.4 microns.

33. The write head described in claim 29 wherein said rectangular prism has a width between about 0.5 and 1.5 microns.

34. The write head described in claim 29 wherein said rectangular prism has a height of between about 2 and 4.5 microns.

35. The write head described in claim 29 wherein said flat layer, on which said front and rear sections rest, is between about 1.4 and 2.6 microns thick.

36. A method to reduce adjacent track erasure in a magnetic write head having an ABS and a flux concentrator, comprising:

providing upper and lower poles, separated by a write gap;

dividing said lower pole into front and rear parts, with said rear part being closer to said upper pole than said front part, and limiting said flux concentrator to said front part, thereby causing any excess magnetic flux between said poles to be limited to a direction that is normal to said ABS.

37. The method described in claim 36 further comprising providing a flux extender that is connected to said flux concentrator and that lies on said rear part.